



Rocky Hill School

2017-18 MIDDLE SCHOOL COURSE OF STUDY

GRADE SPECIFIC PROGRAMS

Required for all students.

GRADE 6 & 7

LIBRARY AND TECHNOLOGY SKILLS

The Library and Technology Skills classes help students to learn information literacy skills and to employ technology as an effective tool for lifelong learning. The classes not only teach the mechanics of using technology, but also the ethical, cultural, and societal issues related to the use of this technology and information. Instruction is integrated into all curriculum areas, consequently grading is assigned to the appropriate academic course. Specific technology topics covered include use of the Moodle™ management system, use of Google™ accounts, and internet safety. Technology instruction is based on the International Society for Technology in Education National Education Technology Standards. Information literacy skills are based on the AASL Standards for the 21st Century.

GRADE 8

EXPOSITIONS

During his or her final year in the Middle School, each eighth- grade student delivers a multimedia presentation to the entire Middle School community. The students select a topic for their exposition at the start of the school year. They conduct research, which must include an interview with someone directly related to their topic, write an expository paper, develop their multimedia presentations throughout the fall, and rehearse their expositions in front of the faculty. They are instructed in effective research techniques, the proper way to conduct an interview, PowerPoint design, and public speaking. Exposition presentations take place in January and February. Previous themes have included Rhode Island, Natural Phenomena and Environmental Issues, Decades, and People Who Have Made a Difference.

VISUAL & PERFORMING ARTS: Grades 6-8

STUDIO ART

All Middle School students have Studio Art two times a week. Students will advance their foundational drawing techniques, strategies for design, and color theory

comprehension in this graded course. Students develop problem solving skills and conceptual thinking by working with a variety of materials, from paint to clay, as they apply the elements and principles of art and design. Projects stem from exposure to art history and contemporary art, multicultural perspectives, and interdisciplinary connections. Documenting the creative process, digital portfolios, visual references, and student-driven presentations are some of the ways the Ipad is used by the Middle School students in art.

INSTRUMENTAL MUSIC

Instrumental music is a graded elective course open to all sixth-, seventh-, and eighth-grade students. Prior experience on a wind instrument in fifth grade is desirable, but not necessary. Sixth-grade students work primarily in a class method book, and seventh- and eighth-grade students focus more on music for performance, supported by exercises in musicianship, stressing tone, intonation, and scale technique development. The Middle School Band performs a Winter and a Spring Concert. The music performed is appropriate to difficulty level and programming is drawn from serious concert band literature and lighter jazz and pop repertoire. Students are prepared for and encouraged to further their instrumental development in the Upper School Band.

CHORUS

The Middle School chorus meets three times per week and is open to all sixth, seventh, and eighth graders. Singers will learn to use their instrument to create a supported, natural sound as they sing in unison and harmony with their peers. In addition to learning proper vocal production and technique, students will focus on music notation and develop sight-reading skills. Chorus will also offer opportunities for students to explore music technology and individual composition projects. We will work together as we perform both on and off campus. Over the course of the year, we will sing a broad range of musical styles as we investigate music from different cultures around the world.

ENGLISH

GRADE 6 – ENGLISH

The theme of English 6 is the hero. Students read about and study heroes both from the ancient civilizations that are the subject of their history course, and from the modern world in novels, poetry, and short stories. Students are encouraged to identify and appreciate the heroic qualities within themselves and their contemporaries. While reading a variety of adaptations of classic tales and selections from contemporary writers, they are asked to identify plot, analyze character, recognize theme, and develop their interpretive skills. Students are introduced to the elements of the writing process, with the goal of expressing their ideas clearly, logically and concisely. The major emphasis of the writing program is on the paragraph (topic sentence, supporting evidence, critical analysis) and the

importance of editing and revising. The English Department supports students in the presentation of research projects in the Modern Language Association (MLA) format.

Students study vocabulary and grammar, both in the context of their own reading and writing, as well as through textbook lessons. Their weekly work in *Heroes*, a collection of stories and exercise designed to strengthen their skill in reading non-fiction texts, further supports the theme of the sixth grade year. Students are also required to complete and respond to independent reading beyond the works assigned for class.

GRADE 7 – ENGLISH

The theme of English 7 is self- discovery through storytelling; students read novels, poetry, and short stories that deal with the themes of growing up and belonging and are encouraged to find and tell their own stories. While reading a variety of adaptations of classic tales and selections from contemporary writers, students are asked to identify plot, analyze character and structure, recognize theme, and further develop their interpretive skills.

Students review and practice the elements of the writing process with the goal of expressing their ideas clearly, logically and concisely. The elements of the analytical essay are stressed, as is the importance of editing and revision. The English Department supports students in the presentation of research projects in MLA format.

Students study vocabulary and grammar, both in the context of their own reading and writing as well as through textbook lessons. Their weekly work in *Monsters*, a collection of stories and exercises designed to strengthen their skills in reading nonfiction texts, further supports the development of skills in both reading and writing. Students are also required to complete and respond to independent reading beyond the works assigned for class.

GRADE 8—ENGLISH

This course is an introduction to literary genres (short stories, novels, poetry, and drama) and is meant to provide a foundation for the study of genres in Upper School English 9. While reading a range of selections, both classic and contemporary, from world literature, students are asked to identify plot, analyze character, discuss theme, and further develop their interpretive skills. The structural differences between the different genres and the significance of these differences are stressed. Students are expected to strengthen and improve writing skills developed in earlier grades, with the goal of being able to express their ideas clearly, logically, and concisely. The elements of the analytical essay (introduction, thesis, body, support, and conclusion) are emphasized, as is the importance of editing and revision. Students also practice personal and fiction writing. Students are required to write at least one research paper (using traditional as well as electronic sources) and present the results in MLA format.

Students study vocabulary and grammar both in the context of their own reading and writing as well as through textbook lessons. They are also required to complete independent reading beyond the works assigned for class.

MODERN AND CLASSICAL LANGUAGES: Grades 6-7

FRENCH I: PARTS 1&2

This two-year course (Part 1 in Grade Six and Part 2 in Grade Seven) introduces students to French: the language and culture. This class will allow students to progressively acquire a solid knowledge and mastery of the language in preparation for French 2. Language is taught through the analysis of various materials and the incorporation of activities that allow students to listen, speak, read, and write in the target language. Grammar and vocabulary are taught in an inductive way, enabling students to understand, practice, and master French syntax. Students will have the opportunity to take the Introductory National French Exam (FLES) and will also be able to sit for the first level of the DELF (an international diploma recognizing French proficiency at various levels) once in the Upper School.

LATIN I: PARTS 1&2

This two-year course (Part 1 in Grade Six and Part 2 in Grade Seven) introduces the young students to the wonders of Roman culture, history, geography, mythology, and, of course, language — Latin! A solid foundation text, *Jenney's First Year Latin*, introduces key grammatical concepts, noted Roman authors, and historic events in preparation for Latin 2. In addition to working through the material in this text, students complete a variety of projects which strengthen their knowledge of the ancient world, while honing their research skills. By developing a foundational understanding of the structure of Latin, students gain a vastly stronger appreciation for English composition and the influence which Latin had over both the structure of English and the etymologies contained therein. Students will also have the opportunity to take the National Latin Exam.

MANDARIN I: PARTS 1&2

This two-year course (Part 1 in Grade Six and Part 2 in Grade Seven) introduces students to Mandarin with a balance between language and culture. The class will allow students to progressively acquire a solid knowledge and mastery of the language in preparation for Mandarin 2. This course aims to develop the learner's communicative ability in Chinese by teaching language structures, functions, and related cultural knowledge, as well as by developing their listening, speaking, reading, and writing skills. Students will have the opportunity to take the Hanyu Shuiping Kaoshi (HSK) level I when they finish Part 2 of this class.

SPANISH I: PARTS 1&2

This two-year course (Part 1 in Grade Six and Part 2 in Grade Seven) introduces students to Spanish: the language and culture. This class will allow students to progressively acquire a solid knowledge and mastery of the language in preparation for Spanish 2. Language is taught through the analysis of various materials and the incorporation of activities that allow students to listen, speak, read, and write in the target language. Grammar and vocabulary are taught in an inductive way, enabling students to understand, practice, and master Spanish syntax. Grammar explanations are done by the students for their classmates on the Explain Everything app. Speaking practice is encouraged through tea chats, skits, and presentations such as "Their Crazy Family Tree." Presentations on various aspects of the Spanish culture are required twice a year. Singing and reciting in Spanish is done regularly to improve the students' pronunciation.

MODERN AND CLASSICAL LANGUAGES: Grade 8

8th grade students take language classes in the Upper School

FRENCH I

For incoming 8th graders and 8th graders who haven't successfully completed Level I: Parts 1&2.

This is the introductory language course for students who have studied little or no French, as well as for those who might previously have experienced difficulty in learning the language. This class introduces the question of identity (as a student, a friend, a family member, a citizen, etc.) through the analysis of various materials that allow students to learn to listen, speak, read, and write in the target language from the beginning. Grammar and vocabulary are taught in an inductive way, allowing students to be involved more fully in understanding the language as they work out different rules, and to increase their motivation. Culture, geographical, and historical facts are interwoven throughout the class. All classes aim to be taught exclusively in the target language.

LATIN I

For incoming 8th graders and 8th graders who haven't successfully completed Level I: Parts 1&2.

This is the beginning language course for students who have studied little or no Latin or for those who might have experienced difficulty in learning the language previously. Latin I formally introduces the fundamental grammatical constructions and the basic vocabulary of the language. Students learn to think about language in a way that English rarely requires. Students learn to treat a Latin sentence as a collection of puzzle pieces that fit together through logical analysis. The textbook presents the fundamental form and structure of the Latin language in a methodical, straightforward manner. Background lectures on the history, art, architecture, culture, and daily life of the Romans are provided to help students understand that Latin was once a living language that contributed so much to English.

MANDARIN I

For incoming 8th graders and 8th graders who haven't successfully completed Level I: Parts 1&2.

The first year of Mandarin Chinese is to develop the ability to communicate orally, emphasizing vocabulary development and basic language functions. Students will use the language to exchange information about topics relating to themselves, their families, and leisure activities. Students will learn basic radicals and stroke order in writing and be introduced to Chinese culture.

SPANISH I

For incoming 8th graders and 8th graders who haven't successfully completed Level I: Parts 1&2.

This is the beginning language course for students who have studied little or no Spanish or for those who might have experienced difficulty in learning the language previously. Students discuss the cultures of Spain and Latin America and make basic cultural comparisons. Dialogues, reading, writing, and grammar study are presented to students in lively, everyday situations, ranging from simple survival tasks such as introducing themselves to more complex topics such as making travel plans. All classes aim to be taught exclusively in the target language.

FRENCH II

Prerequisite: successful completion of French I.

This course continues to introduce major grammatical and conversational points and includes a review of those studied in French I. While still considered a beginner level course, students are taught to express themselves with more sophisticated vocabulary and grammar. Students learn how to appropriately behave and act in real-world situations and analyze various authentic materials in order to allow them to strengthen both their linguistic and cultural proficiency in the target language. Grammar and vocabulary are taught in an inductive way, allowing students to be involved more fully in understanding the language as they work out different rules and to increase their motivation. All classes aim to be taught exclusively in the target language.

LATIN II

Prerequisite: successful completion of Latin I.

Latin II bridges the gap between introductory language study and the reading of actual Latin texts. The course begins with a rapid review of the major principles presented in Latin I, and then introduces more complex sentence structures, notably uses of participles and subjunctive moods. A single form of a Latin word may have several grammatical interpretations, and as students find themselves with more and more options, the task of translation requires them to remember all these options and sift through them carefully until they find the best one.

Throughout the year, students read passages from the works of Caesar, Cicero, and Catullus, adapted at first, then eventually unaltered.

MANDARIN II

Prerequisite: successful completion of Mandarin I.

In Mandarin II, students continue their study of Mandarin Chinese by further expanding their knowledge of key vocabulary, complex phrases, correct pronunciation, and grammar concepts. In this course, students will begin to comprehend listening and reading passages without guided assistance, and they will also start to express themselves more meaningfully in both speaking and writing. Even though character recognition and practice on correct stroke order is still a key focus of the course, pinyin is also presented with characters throughout the course to aid in listening and reading comprehension. By the end of the course, students are expected to be actively engaged in their own language learning, understand common vocabulary terms and phrases, and use a wide range of grammar patterns in their speaking and writing. Students will be able to participate in conversations and respond appropriately to conversational prompts, analyze cultural practices, and compare similarities and differences between domestic and Chinese culture, such as food, clothes, and transportation.

SPANISH II

Prerequisite: successful completion of Spanish I.

This course begins with a brief review of the first-year program, and continues the study of Spanish with greater emphasis on oral communication in daily contexts. Students learn many new verb tenses and apply their correct usage to both their writing and speaking proficiency. Students expand their vocabulary and participate in more analytical discussions of cultural comparisons. All classes aim to be taught exclusively in the target language.

MATHEMATICS

Below is the standard sequence of mathematics courses in the Middle School. 6th & 7th Grade students with advanced ability and performance in mathematics may be placed in the next level course, based upon teacher recommendation. Advanced 8th Grade students may be placed in the Upper School Honors Geometry course.

GRADE 6 — MATHEMATICS

The year begins with the concepts of decimal and fraction operations, metric measurement, patterns, and number theory. Next, students are introduced to the new concepts of ratio, proportion, percent, and probability, all of which are learned through the study of real-life data. In learning new material, students often discover through investigation as they work cooperatively to understand mathematics. Periodically throughout the course, both geometric and algebraic concepts are presented as students build a base for future mathematics courses.

GRADE 7 — PRE-ALGEBRA

In this course, there are two key goals. The first is to reinforce the skills necessary for beginning algebra students. The second is to use present skills in greater depth and to apply them to new situations. In preparation for Algebra I, students study the order of operations, integer operations, variables, and equations. The early and frequent introduction of variables and equations helps promote the transition from concrete to abstract thought. Analytical thinking is encouraged through the extensive and ongoing interpretation of various graphic representations, such as bar graphs, line graphs, pie charts, and scatter plots. Much of the data studied throughout the course is student-generated, and many of the activities are done in small, cooperative groups.

GRADE 7 or 8 — ALGEBRA I

This course introduces the fundamental principles of algebra while supporting and developing skills already learned. Students learn to solve and graph linear functions, and investigate the use of exponents and the arithmetic of polynomials, systems, and quadratic equations. A major goal of the course is to build confidence and to show students that mathematics can solve real problems. Students take advantage of manipulative materials and various technologies. They also use probability, data analysis, and inequalities. Word problems are emphasized throughout the course. A student who successfully completes this course is ready for Algebra II in the Upper School.

SCIENCE

GRADE 6 — ENVIRONMENTAL SCIENCE

The Environmental Science course has five objectives. The first is for students to gain firsthand experience in natural settings. Students learn how to use various types of maps in a hands-on study of the Potowomut and Hunt River Watersheds. In addition to the forests and fields, the river system on campus features excellent waterfront access and encompasses a wide spectrum of salt and fresh water communities. Second, students learn about nonnative species in New England and their impact on local animals and plants. Third, each student completes an independent study of one organism or factor in the watershed in depth, and then creates a PowerPoint presentation that exhibits his or her research in an interactive way. Fourth, students examine how local ecological systems compare with rainforest communities around the world. In small groups, students look at human communities living in rain forests and consider how people might reconcile family economics with rain-forest conservation. Finally, students develop an understanding of the estuary by exploring the wonderful marine communities and the ecological food webs that nurture and support them along the shores of Rocky Hill's waterfront campus.

GRADE 7 — EARTH SCIENCE

How was the Earth formed? Why do earthquakes occur? Why does it rain? What makes the ocean blue? These questions and more are explored as the seventh grade surveys Earth's mysteries and its wonderful system of change and renewal. Students work on a variety of individual and group projects during the year as they explore volcanoes, earthquakes, and weather patterns. They research and make oral presentations on topics including atoms, ocean processes, and planets. Earth Science is a hands-on class in which students learn through labs and field trips. The students use Rocky Hill's extensive rock collection and explore the unique ecology of Jamestown as they learn about rocks and minerals. Our dynamic campus is the perfect setting for study of oceans and erosion. Study of climate and seasons is enhanced by a trip to Nature's Classroom in Charlton, Mass., where the class spends three days learning about the local climate and winter ecology. Earth Science is a year of discovery, which helps students better understand this unique and amazing planet.

GRADE 8— MARINE EXPLORATIONS & PHYSICS BY DESIGN

The 8th grade year in science is a tale of two objectives. Taking advantage of the school's natural marine and estuarine environment during the fall, the course will focus on our salt marsh, in particular the invasive plant species phragmites, which exists in abundance and is encroaching on the native marsh vegetation. The students will map the extent of coverage, look at growth rates and genetic variation of individual plants, and explore the history and threat of this and other invasive species. Beginning in late fall, the focus of 8th grade science transitions to a STEM study of the basic principles of Newtonian physics through the use of Lego™ EV3 Robotics. The physics concepts are clearly illustrated through the multiple applications and functions of the robots. The technology is at the heart of this system, and engineering takes place every time a student puts his or her mind to a challenge to be solved with the EV3s. Physics concepts will include: velocity, acceleration, understanding forces, simple machines and mechanical advantage, center of gravity, friction, rotational motion, and Newton's Laws of Motion.

SOCIAL STUDIES

GRADE 6 — ANCIENT HISTORY

This course uses the study of Egypt, Greece, India, China, and Rome to introduce students to the wonders of the ancient world and to help them develop the skills they will need in future social studies courses. In studying these civilizations, emphasis is placed on how each culture built on the achievements of others, while also developing its own unique solutions to the problems all humans face. Topics covered include government, religion, language, social development, art, and architecture. Throughout the year, careful reading, good note taking, and geographic awareness are stressed. Projects help the students improve their research, public speaking, and time management skills.

GRADE 7 — WORLD GEOGRAPHY AND ITS HUMAN IMPACT

In today's changing world, global awareness is an important part of any education. This course concentrates on the skills needed to understand the earth, with a particular focus on the five themes of geography: location, place, region, movement, and human environment interaction. Students examine charts, graphs, and maps, as well as connect people and their common characteristics, to gain a sense of the world's many regions. Much of the course is Internet-based in order to access more resources. This approach enables students to find up-to-date information on countries, global issues, and world events, with an emphasis on some of the geopolitical "hot spots" that are dominating our lives, such as the Middle East and Southeast Asia. Many skills are taken away from these studies, including vocabulary development, identification of main ideas, understanding of basic map components, and research for essay writing. At the conclusion of this course, students have a greater understanding of nations and a better knowledge of the world's diversity.

GRADE 8 — GOVERNMENT

This course focuses on the history, development, and functions of the United States government and the significant problems facing the nation today. The course reviews the major ideas and events that led to the writing of the Declaration of Independence and the U.S. Constitution. Students complete the study of the three branches of the federal government along with an investigation of the country's modern political and election process. Throughout the year, the course uses current events to illustrate and further develop the material presented in the texts. Therefore, students must keep abreast of the news, and are quizzed on current issues weekly. During this course, students develop their note taking, summarizing, organizational, and research skills. In addition, students visit the U.S. District Court in Providence.